Building Site	Trench Unit	Box Plots	Q-Q Plots	Rounds of excavation	Gamma scan or static concerns	On vs offsite lab	Time Series	Suspect name (1=yes, 0=no)	Name, if suspect	Name, if not suspect	Signs of falsifying (1=Yes, 0=no)	Signs of falsification summary	Failure to follow workplan (1=Y, 0=N)	Signs of failure to follow workplan	Comments - Other	Followup needed, e.g. questions for Navy	CDPH Recommendation
114	SU 1	NA	NA	0 rounds of excavation, no bias samples collected	The gamma static data are consistent with the scan data and the reference area dataset. The gamma scan data is consistent with the static data and the reference area dataset.	Offsite lab samples for Sr-90 have 4 to 5 times the mass compared to the onsite lab. 34 available isotopes comparisons between onsite and offsite data 5 had differences greater than a factor of ten. However, all of these values near zero. FSS samples were collected from 05/26/2005 to 06/14/2005, however samples were counted between 05/01/2007 and 05/03/2007.	NA	0	No Scan/Static Surveyor Name Provided	No Scan/Static Surveyor Name Provided	1	FSS samples collected over a period of 19 days and the onsite lab analysis was not completed for two years. FSS samples were collected from 05/26/2005 to 06/14/2005, Samples were counted between 05/01/2007 and 05/03/2007.	0	NA	FSS samples were collected from 05/26/2005 to 06/14/2005, Samples were counted between 05/01/2007 and 05/03/2007. Scan/Static Surveyor Name Not Provided	Explain the delay of soil collection and counting dates	Resample
114	SU 2	NA	NA	0 rounds of excavation, no bias samples collected	The gamma static data are consistent with the scan data and the reference area dataset. The gamma scan data is consistent with the static data and the reference area dataset.	The samples that were send to the offsite lab for Sr-90 analysis have larger mass than the samples that were processed onsite. FSS samples were collected from 05/26/2005 to 06/14/2005, Samples were counted between 05/01/2007 and 05/03/2007.	NA	0	No Scan/Static Surveyor Name Provided	No Scan/Static Surveyor Name Provided	1	FSS samples collected over a period of 19 days and the onsite lab analysis was not completed for two years. FSS samples were collected from 05/26/2005 to 06/14/2005, Samples were counted between 05/01/2007 and 05/03/2007.	0	NA	FSS samples were collected from 05/26/2005 to 06/14/2005, Samples were counted between 05/01/2007 and 05/03/2007. Scan/Static Surveyor Name Not Provided	Explain the delay of soil collection and counting dates	Resample
130	SU 8	NA	NA	0 rounds of excavation, no bias samples collected	Gamma Scan Data not provided in FSSR, The data package for SU-008 in the FSSR reports 340 static gamma measurements ranging from -1,033 net gamma cpm to 1,096 net gamma cpm, with mean value -192 and standard deviation 487. The gamma background was 6,899 cpm and the 3-sigma investigation level was 6,899 cpm. No measurements exceeded the investigation level.	Samples 1-20 were collected on 01/14/2009. Sample 1-9 were counted on 01/14/2009 (same working day), and samples 10-20 were counted on 01/15/2009 (after 1 working day). Two field duplicate (#5 & #10) samples were counted on 09/23/2009.	NA	0	No Scan/Static Surveyor Name Provided	No Scan/Static Surveyor Name Provided	1	Sample #10 presented a K-40 Results near zero. Two field duplicates 5 and 10 samples were counted on 9/23/2009, 251 days after all other samples were analyzed, possibly providing an opportunity to replace and reanalyze the sample. No explanation of the unusual delay in analysis was provided in the report.	1	Gamma scan data not provided in FSSR.	Sample #10 presented a K-40 Results near zero. Two field duplicates #5 and #10 samples were counted on 9/23/2009, 251 days after all other samples were analyzed, possibly providing an opportunity to replace and reanalyze the sample. No explanation of the unusual delay in analysis was provided in the report. Scan/Static Surveyor name not provided in FSSR. The investigation level was 4.2 standard deviations above the mean.	Why is Sample #10 K-40 is zero? Explain the delay in soil analysis. Explain why two field duplicates #5 and #10 samples was counted 251 days after all the other samples were analyzed. Explain why the gamma static release criteria was increased to mean + 4.2 standard deviation.	Resample
130	SU 17	NA	NA	0 rounds of excavation, no bias samples collected	Gamma Scan Data not provided in FSS. The data package for SU-017 in the FSSR reports 250 static gamma measurements ranging from -928 net gamma cpm to 1,807 net gamma cpm, with mean value -241 and standard deviation 447. The gamma background was 6,899 cpm and the 3-sigma investigation level was 9,160 cpm. No measurements exceeded the investigation level. The investigation level was 4.5 sigma values above the mean.	Samples 1-20 were collected on 01/14/2009. Sample 1-19 were counted on 01/19/2009 (after 3 working days), and sample 20 was counted on 01/20/2009 (ater 4 working days). Two field duplicate (#1 and #9) samples were counted on 09/23/2009. The data is consistent for K-40 and Bi-214. The resulsts for Ac-228 are approximately double.	NA	0	No Scan/Static Surveyor Name Provided	No Scan/Static Surveyor Name Provided	1	Two Field Duplicate samples 1 and 9 was analyzed 247 days after all other samples were analyzed, possibly providing an opportunity to replace and re-analyze the sample. No explanation of the unusual delay in analysis was provided in the reports.	1	Gamma Scan data not provided in FSSR.	Two Field Duplicate samples #1 and #9 was analyzed 247 days after all other samples were analyzed, possibly providing an opportunity to replace and re-analyze the sample. No explanation of the unusual delay in analysis was provided in the report. Scan/Static Surveyor Name not provided in FSSR	Explain the delay in soil analysis. Explain why two field duplicates #1 and #9 samples was counted 247 days after all the other samples were analyzed. Explain why the gamma static release criteria was increased to mean + 4.5 standard deviation.	Resample
142	SU 1	NA	NA	Characterization and final systematic samples collected in Survey Units 1 and 2 are representative of two different soils, separated by what was defined in the FSSR as a second subsurface structure. Characterization samples were collected from above the subsurface structure, and final systematic samples were collected below the subsurface structure, where the FSSR identified the orginal footprint was located.	One-minute static counts collected at each of the 16 systematic locations on 02/08/2007 by J. Hubbard. Gamma static counts ranged between 2,135 and 4,806 counts per minute (cpm). "Characterization" gamma scan (100% coverage) performed on 09/06/2006 (the day after sampling) by J. Hubbard. Range was between 2,000 and 6,000 cpm – less than the investigation level of 6,092 cpm. Background rate was 5,400 cpm. "Final Status" gamma scan performed 02/08/2007 (the day after sampling) by J. Hubbard. Range was between 4,900 and 6,000 cpm - less than the background +3 sigma (σ) investigation level of 6,581 cpm. Background rate was 5,100 cpm.	All Final Systematic samples were collected on 02/07/2007. FSS samples were collected after confirmatory/biased samples which were collected on 09/05/2006.Most FSS samples (14 of 16) were analyzed within 3 working days; the other two FSS samples were analyzed within 1 working day. Onsite and offsite data were consistent.	One FSS sample had a near-zero result for Bi-214, sample 6PB142SU1-22. There was also two negative Ac-228 FSS results (6PB142SU1-018 and 6PB142SU1-025)	1	J Hubbard / D Rosenhagen	NA	1	"Characterization" gamma scan performed the day after sampling. "Final Status" gamma scan also performed after sampling.	1	"Characterization" gamma scan performed the day after sampling. "Final Status" gamma scan also performed after sampling.	Data quality issue for FSS samples with low activities for Bi-214, Pb-214 and Ac-228. "Characterization" gamma scan performed the day after sampling. "Final Status" gamma scan also performed after sampling.	Explain why gamma scans were conducted before sampling.	Resample
142	SU 2	K-40 Characterization and FSS box plot differ markedly, mean characterization activity is abnormally low (1.68 pCi/g) vs. FSS mean activity (7.94 pCi/g).	NA	Characterization and final systematic samples collected in Survey Units 1 and 2 are representative of two different soils, separated by what was defined in the FSSR as a second subsurface structure. Characterization samples were collected from above the subsurface structure, and final systematic samples were collected below the subsurface structure, where the FSSR identified the original footprint was located.	One-minute static counts collected at each of the 16 systematic locations on 02/08/2007 by J. Hubbard. Gamma static counts ranged between 2,535 and 4,607 counts per minute (cpm). "Characterization" gamma scan (100% coverage) performed 09/006/2006 (the day after sampling) by J. Hubbard. Range was between 2,000 and 6,000 cpm – less than the investigation level of 6,092 cpm. Background rate was 5,400 cpm. "Final Status" gamma scan performed 02/08/2007 (the day after sampling) by J. Hubbard. Range was between 4,900 and 6,000 cpm - less than background +3 sigma (σ) investigation level of 6,581 cpm. Background rate was 5,100 cpm.	All Final Systematic samples were collected on 02/07/2007. FSS samples were collected after confirmatory/biased samples which were collected on 09/05/2006. Most FSS samples (14 of 16) were analyzed within 3 working days; the other two FSS samples were analyzed within 1 working day. Onsite and offsite Data were consistent.	One FSS sample had a near-zero result for Bi-214, sample 6PB142SU2-018. The Pb-214 result was positive at 0.23 pCi/g, but the Ra-226 result was also negative. This occurrence does not indicate potential data falsification. There was also one negative Ac-228 FSS result. For sample 6PB142SU2-019, other thorium-series nuclide results were positive, 0.13 pCi/g for Pb-212 and 0.11 pCi/g for Tl-208, but Bi-212 activity was also negative.	1	J Hubbard/D Rosengathan	NA	1	"Characterization" gamma scan performed the day after sampling. "Final Status" gamma scan also performed after sampling.	1	"Characterization" gamma scan performed the day after sampling. "Final Status" gamma scan also performed after sampling.	Data quality issue for FSS samples with low activities for Bi-214, Pb-214 and Ac-228. "Characterization" gamma scan performed the day after sampling. "Final Status" gamma scan also performed after sampling.	Explain why gamma scans were conducted before sampling.	Resample

142	SU 3	NA	NA	Characterization and final systematic samples collected in Survey Units 1 and 2 are representative of two different soils, separated by what was defined in the FSSR as a **second subsurface structure**. Characterization samples were collected from above the subsurface structure, and final systematic samples were collected below the subsurface structure, where the FSSR identified the orginal building footprint was located.	"Characterization" gamma scan (100% coverage) performed 09/06/2006 (the day after sampling) by J. Hubbard. Range was between 2,000 and 6,000 cpm – less than the investigation level of 6,092 cpm. Background rate was 5,400 cpm. "Final Status" gamma scan performed 02/08/2007 (the day after sampling) by J. Hubbard. Range was between 4,900 and 6,000 cpm - less than the background +3 sigma (σ) investigation level of 6,581 cpm. Background rate was 5,100 cpm. One-minute static counts collected at each of the 22 systematic locations on 02/08/2007 by J. Hubbard. Gamma static counts ranged between 3,034 and 5,841 counts per minute (cpm).	Most FSS samples (20 of 22) were analyzed within 3 working days; the other two FSS samples were analyzed within 1 working day. Onsite and Offsite data were consistent	Two FSS samples had zero (0 pCi/g) results for Bi-214, samples 6PB142SU3-024 and 6PB142SU3-025. For sample 6PB142SU3-024, other radium-series results were mixed; the Pb-214 result was 0.39 pCi/g, however the Ra-226 result was negative at -0.44 pCi/g. For sample 6PB142SU3-025, other radium-series nuclide results were also mixed; the Pb-214 result was 0.30 pCi/g, however the Ra-226 result was negative at -0.50 pCi/g.	1	J Hubbard/ D Rosengathan	NA	1	"Final Status" gamma scan performed 02/08/2007 (the day after sampling) by J. Hubbard. Range was between 4,900 and 6,000 cpm - less than the background +3 sigma (σ) investigation level of 6,581 cpm. Background rate was 5,100 cpm. All Final Systematic samples were collected on 02/07/2007.	1	"Final Status" gamma scan performed 02/08/2007 -the day after sampling.	Data quality issue for FSS samples low activities for Bi-214, Pb-214 and Ac-228. "Final Status" gamma scan performed after sampling.	Explain why the gamma scan was performed on 2/8/07 and FSS sampling was sampled 2/7/07	Resample
157	SU 5	NA	Final Systematic samples indicate the potential for at least two different data populations for Bi-214 and K-40.	several rounds of soil excavated. SU-5 had 20 FSS Samples, 6 remedial action biased samples, and 20 systematic characterization samples collected.	Scan measurements were taken on 01/06/2010, with 700 total readings taken. None of the reading exceeded an investigation level (3 sigma, based on a background area average). Static measurements were taken on three different dates – 01/06/2010, 01/29/2010, and 3/04/2010. No measurements exceeded the investigation level (3 sigma). The scan measurements do show correlation to the static measurements	Data for comparison is limited since only two samples were sent to the offsite laboratory for analysis.	Four out of 20 gamma spec reports for FSS samples had deviation between sample count date and report date.	0	No Scan/Static Surveyor Name Provided	No Scan/Static Surveyor Name Provided	1	Sample 19157-S0005-F198-01 was counted out of sequence and 1 working day after all other FSS samples. Four out of 20 gamma spec reports for FSS samples had deviations between sample count date and report date. Static readings were collected over a period of three months.	0	NA	NA	Explain why soil sample 19157-S0005 was counted out of sequence and four out of the 20 gamma spec reports for FSS samples had deviations between sample count date and report date. Also why static reading were collected over a period of three months.	Resample
157	SU 7	NA	Final Systematic samples indicate the potential for at least two different data populations for Bi-214 and K-40	0 rounds of excavation, no bias samples collected	Scan measurements were taken on 03/11/2010, with 1,631 total readings taken. None of the reading exceeded an investigation level (3 sigma, based on a background area average). Static measurements were taken on 03/11/2010 at each sampling location associated with the FSS samples, resulting in 19 measurements. No measurements exceeded the investigation level (3 sigma).	Data for comparison is limited.	NA	NA	No Static/Surveyor Name Provided	No Static/Surveyor Name Provided	0	NA	0	NA	Ten out of 20 gamma spec reports for FSS samples had deviations between sample count start time and the analysis time when the gamma report was generated. Six samples (234, 235, 238, 245, 246, and 251) were counted on 03/12/2010, but the gamma reports were generated on 03/15/2010. These reports appear to have been reviewed and had had replacement reports generated after making a minor correction. Samples 240, 243, 249, and 250 were counted on 03/12/2010 and 03/15/2010, but the gamma reports were not generated until 04/21/2010 and 04/22/2010. There is no discussion of why the reports were generated 45 days after the samples were counted, or what changes were made, if any. The results do not appear to be different from other sample results where the gamma reports were generated at the end of the sample count.	Explain the delay in generating the gamma reports after 3-45 days after the samples were counted. Also explain the two different data populations for K-40.	NFA